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(54) Title: MEDICAL DIAGNOSIS, TREATMENT AND IMAGING SYSTEMS

(57) Abstract

A locating system for determining the location and orientation of an invasive medical instrument, for example a catheter (10) or endoscope, relative to a reference frame, comprising: a plurality of field generators (18, 20, 22) which generate known, distinguishable fields, preferably continuous AC magnetic fields, in response to drive signals; a plurality of sensors (30, 32, 34) situated in the invasive medical instrument (10) proximate the distal end thereof which generate sensor signals in response to said fields; and a signal processor (26) which has an input for a plurality of signals corresponding to said drive signals and said sensor signals and which produces the three location coordinates and three orientation coordinates of a point on the invasive medical instrument.

